ALL-FREQUENCY-BAND SSB RADIO COMMUNICATION SYSTEM AND RADIO APPARATUS

ABSTRACT OF THE DISCLOSURE

An SSB radio communication system and radio apparatus applicable to ultra high frequencies such as a VHF band and UHF band. In the transmitting side, a carrier wave is amplitude modulated by modulation input signals which comprise a constant amplitude, sine wave shaped reference pulse having a predetermined width and period and a sine wave shaped modulation pulse signal having an amplitude representing two- or multi-value digital values having the same width as the reference pulse signal and which are formed based on the amplitude of the reference pulse signal, and the modulated pulse signals are transmitted on a single side band, while in its receiving side the gain of received signals is automatically adjusted based on the reference pulse signal that is the value of the peak of the received signals. Further, in the transmitting side, the period or frequency of the reference pulse signal is also formed in synchronism with the carrier wave frequency, and in the receiving side, a local carrier wave frequency to be given to a demodulator is determined based on the period of frequency of the reference pulse signal.